

MOARK 7 FARMS

NEOSHO, MISSOURI

By Camille Dobler
Environmental Specialist, MDNR

MOARK, LLC - Missouri Farms

- MOARK 7 Farms, Neosho, Newton County
 - Timberview - layers
 - Sawmill - layers
 - Hathaway - layers
 - Meadows - layers
 - School - layers
 - Pullet - young replacement layers
 - Farmers Automatic Building (FAB) & Composting Pads
- MOARK Topnotch, Jasper County
 - Tackborne East
 - Tackborne West
 - Smith
- MOARK Anderson, McDonald County

MOARK 7 Farms, Neosho



Existing Layer Houses

School, Sawmill, Timberview, Meadows



Manure Storage - Older Houses



New Layer Houses

Hathaway, and future houses





Manure Storage - New Houses



Poultry Waste



Waste from old houses



Waste from new houses

Waste Handling Options for Existing Houses

- Land apply raw manure from old houses
 - Strong odors at land application site
 - Less stable, increased potential for run-off
 - Harder to manage/transport
- Compost waste from old houses
 - Reduces volume by 1/4 to 1/2
 - Reduces odor at land application sites
 - Lowers the risk of pollution
 - Reduces pathogens
 - Improves handling

Farmer Automatic Building (FAB)

- Late 90's, Farmer Automatic Building (FAB) was put into use to reduce the strong odors from raw manure
 - The operation was not intensive and the compost was not marketed
- June 2003 - FAB was restarted
 - Manure management was now directed by Hugh Vogel and intensive efforts were put into composting and marketing the product outside the watershed
- June 2004 - 2 covered pads were constructed so that more raw manure could be composted

Farmer Automatic Building (FAB)



Compost Pads



ODOR

Odor Sampling Procedure

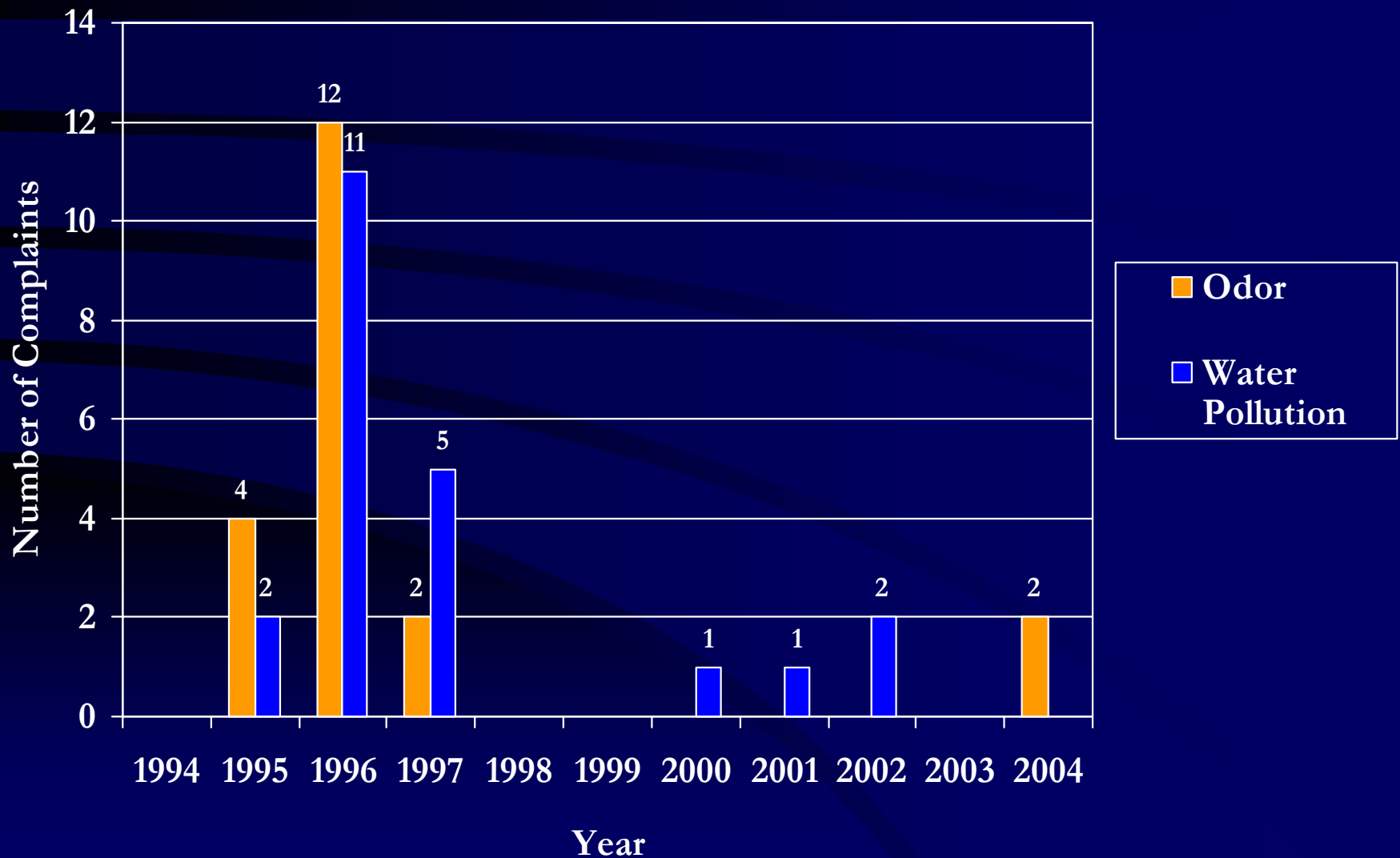
- Office receives complaint
 - inspector drives to location of complaint
 - scentometer is used at a dilution of 7:1
 - if 2 detection occur at 7:1, air samples are collected and shipped overnight for analysis
- Random surveillance of MOAK 7 farms
 - strong odors are detected with inspector's nose
 - inspector leaves area to clear nose and returns with scentometer
 - screen with scentometer, and collect samples if detections occur

Odor Sampling

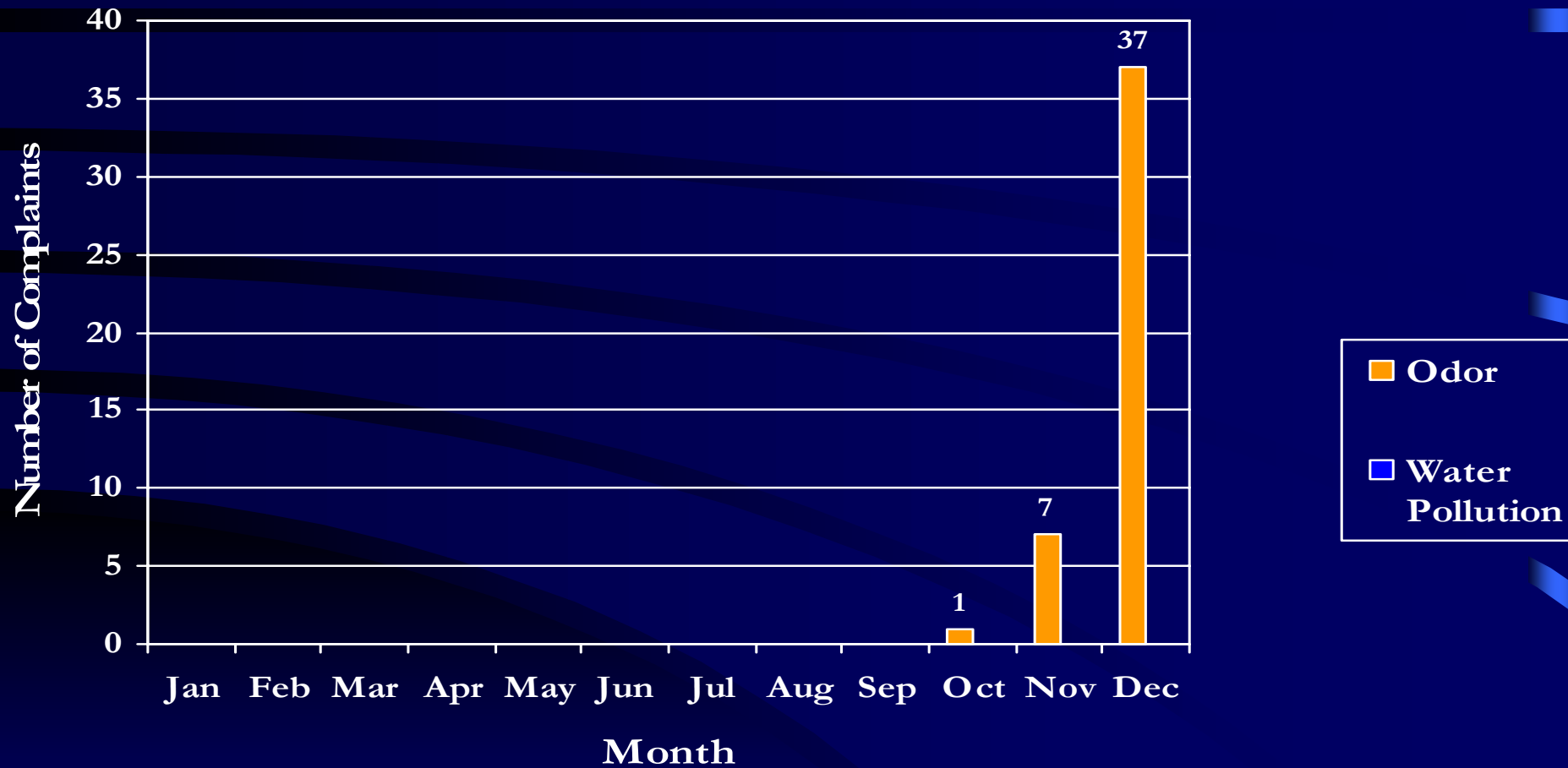


MOARK 7 Farms

Complaints 1994 - 2004



MOARK 7 Farms Complaints 2005



Composting Status

- June 04' - December 05': 1000-1200 tons manure/week composted:
 - All the MOARK 7 Farm manure was composted
 - One half of the Anderson Farm manure was composted
 - Total composted was 70% of manure produced by MOARK
- December 9, 2005 - MOARK exceeds the 110 detection threshold limit for odor northeast of the composting facility
- Since the NOEE, composting has been phased out
- 100% of raw manure is now land applied outside the watershed

MOARK 7 Farms Complaints 2006

